

(D) a compound which is activated by irradiation to initiate polymerization of the polymerizable group in the compound (C); and

(E) a thixotropic agent

wherein:

a 1
said adhesive composition has a viscosity at 25 °C of 1 - 10,000,000 cps, conversions of the compounds (A) and (C) are in the range of 10 - 70 %, the composition immediately after its exposure to the active energy radiation has a dynamic shear modulus in the range of $10^5 - 10^7$ Pa; and

100143-123104
the conversions of the compounds (A) and (C) after exposure of the adhesive composition to the active energy radiation and subsequent 24-hour aging at 25 °C are in the range of 50 - 100 %, and after exposure of the adhesive composition to the active energy radiation and subsequent 24-hour aging at 25 °C, the cured composition has an elongation at break of 10 - 1,000 % and a dynamic tensile modulus in the range of $10^5 - 10^9$ Pa.

a 2
3. (Amended) The adhesive composition as recited in claim 1, wherein the conversions of the compounds (A) and (C) immediately after exposure of the adhesive composition to the active energy radiation are in the range of 10 - 70 % and the adhesive composition has a viscosity at 25 °C of 1 - 10,000,000 cps; and the conversions of the compounds (A) and (C) after exposure of the

a² adhesive composition to the active energy radiation and subsequent 12-hour aging at 25 °C is in the range of 50 - 100 %.

a³ 5. (Amended) The adhesive composition as recited in claim 1, wherein the hydrolyzable silyl group in the compound (A) is a alkoxysilyl group, and the compound (A) is a compound containing the alkoxysilyl group substituted in a polymer selected from polyalkylene glycols and polyolefins.

6. (Amended) The adhesive composition as recited in claim 1, wherein the polymerizable group in the compound (C) is a free-radically polymerizable group and the compound (D) is a photochemically free-radical generating agent.

7. (Amended) The adhesive composition as recited in claim 1, wherein the free-radically polymerizable group in the compound (C) is a polymerizable group selected from acryloyl and methacryloyl groups.

8. (Amended) The adhesive composition as recited in claim 1, wherein the compound (C) contains at least one type of compound (F) containing at least one polymerizable group in a molecule and having a weight average molecular weight of not less than 3,000.

a4 10. (Amended) A method of joining members comprising, in sequence, applying the adhesive composition as recited in claim 1 to one of the members, exposing a top surface of the applied adhesive composition layer to an active energy radiation, and combining the one member with the other member.

Please add new claims 11-21 as follows:

a5
11. An adhesive composition comprising:
a compound (X) having a crosslinkable or polymerizable group;
and
a compound (Y) which is activated when exposed to an active energy radiation to generate species that cause crosslinking or polymerization of at least a part of the compound (X) wherein:
a conversion of the compound (X) immediately after exposure of the adhesive composition to the active energy radiation does not exceed 30 %, and the composition has a viscosity at 25 °C of 1 - 10,000,000 cps; and
a conversion of the compound (X) after exposure of the adhesive composition to the active energy radiation and subsequent 12-hour aging at 25 °C is in the range of 50 - 100 %.

12. The adhesive composition as recited in claim 3, wherein the hydrolyzable silyl group in the compound (A) is a alkoxysilyl group, and the compound (A) is a compound containing the alkoxysilyl group substituted in a polymer selected from polyalkylene glycols and polyolefins.

95
13. The adhesive composition as recited in claim 3, wherein the polymerizable group in the compound (C) is a free-radically polymerizable group and the compound (D) is a photochemically free-radical generating agent.

14. The adhesive composition as recited in claim 5, wherein the polymerizable group in the compound (C) is a free-radically polymerizable group and the compound (D) is a photochemically free-radical generating agent.

15. The adhesive composition as recited in claim 3, wherein the free-radically polymerizable group in the compound (C) is a polymerizable group selected from acryloyl and methacryloyl groups.

16. The adhesive composition as recited in claim 5, wherein the free-radically polymerizable group in the compound (C) is a polymerizable group selected from acryloyl and methacryloyl groups.

17. The adhesive composition as recited in claim 7, wherein the free-radically polymerizable group in the compound (C) is a polymerizable group selected from acryloyl and methacryloyl groups.

18. The adhesive composition as recited in claim 3, wherein the compound (C) contains at least one type of compound (F) containing at least one polymerizable group in a molecule and having a weight average molecular weight of not less than 3,000.

19. The adhesive composition as recited in claim 5, wherein the compound (C) contains at least one type of compound (F) containing at least one polymerizable group in a molecule and having a weight average molecular weight of not less than 3,000.

20. The adhesive composition as recited in claim 6, wherein the compound (C) contains at least one type of compound (F) containing at least one polymerizable group in a molecule and having a weight average molecular weight of not less than 3,000.

21. The adhesive composition as recited in claim 7, wherein the compound (C) contains at least one type of compound (F) containing at least one polymerizable group in a molecule and having a weight average molecular weight of not less than 3,000.